STATE OF MAINE
DEPARTMENT OF ENVIRONMENTAL PROTECTION

JOHN ELIAS BALDACCI
GOVERNOR

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COMMISSIONER

February 20, 2007

Mr. Orlando Monaco
Department of Navy
Base Realignment and Closure
Program Management Office-Northeast
4911 South Broad Street
Philadelphia, PA 19112-1303

Re: Topsham Annex-Draft Closeout Report-TPH Soil Removal & Investigation Activities
Naval Air Station, Brunswick

Dear Mr. Monaco:

The Maine Department of Environmental Protection (MEDEP) has reviewed the draft Closeout Report for TPH Soil Remediation and Investigation Activities, Topsham Annex", dated January 10, 2007, prepared by Tetra Tech EC, Incorporated. Based on that review MEDEP has the following comments and issues.

General Comments:

1. In general, the investigation completed most of the proposed tasks within the limits imposed by shallow water table near former Building 369, and the bounds of structures and utilities elsewhere that prevented meeting the remedial action goal of 10 ppm of total petroleum hydrocarbon (TPH) contaminated soils. However, the review of this report was hindered by the lack of several pieces of key information including boring logs, well installation logs, groundwater sample field sheets, and Chain-of-Custody (COC) sheets for the analytical samples collected at various sites. MEDEP cannot perform an adequate review without this information so please provide the missing information so that MEDEP may review them prior to Tetra Tech finalizing the report.

2. Based on the correspondence and comment prior to approval of the work plan, electronic versions of the survey data and an electronic data deliverable (EDD) of the analytical data were to be included in the report. Those files were not included in the report, although printouts of the data were included as Appendix I and Appendix J. Navy should supply the electronic versions as an additional appendix.

3. MEDEP would appreciate if the document could be duplexed (copied two sides) where possible to reduce the size of the document, as shelf space is limited.

4. Please include a figure of the entire site in the report.

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5. At 220 Congress Street-Building 1108 (residential) front and rear, 238 Parliament Circle-, Building 1099 (residential) front, 233-239 Parliament Circle-Building 1114 (residential) front, and Republic Ave-Building 338 soil contaminated with DRO was left in exceedence of the remedial action goal of 10 part per million. The DRO concentrations, in some places, are at levels where groundwater can be affected. What is the Navy's plan for dealing with the remaining areas?

Specific Comments:

6. Section 1.0: Please add the investigation of Building 369 and TOP 1 in the introductory statement.

7. Section 3.3.2.1 and Table 2: *"Both media exhibited elevated concentrations..."*

   The liquid sample from the drain exceeded Maine Maximum Exposure Guidelines (MEGs) for groundwater and Maine Surface Water Quality Criteria for lead, chromium and arsenic. The sample was unfiltered, however, and since the water is in a drain it is unclear how it enters and leaves the drain system. At a minimum it suggests that groundwater in the vicinity of the former Building 369 is not suitable for drinking water.

   It is not surprising that no VOCs were detected based on the sampling procedures for the contents of the drain. Vinyl chloride (the primary VOC at Building 369) would rapidly dissipate in those conditions. It is also possible that any residual chlorinated compounds have attenuated by dilution or degradation, and are no longer present. Please provide the discharge point is for this drain pipe.

8. Section 3.3.2.2 and Section 3.3.2.3: *"As the excavation proceeded for Test Trench 3..."*

   It is unfortunate that this trench was halted before attempting to excavate near the center of the drain area, as proposed. The central portion had been shown previously as the main area where drains exited the building. The high water table that limited this work may be unavoidable due to perched water from the former foundation of Building 369.

9. Section 3.3.3 para. 1 and Appendix A, Figure 10: *"Five direct-push soil borings..."*

   As noted in the general comments the boring logs must be submitted for the five borings. At location TOP-01-06 (according to the Trip Report filed by Sean Dougherty of MEDEP), the rig hit refusal at 4" several times before getting a location completed. It is possible this represents disposed material such as concrete debris related to the "Filled Area".

10. Section 3.3.3 para. 3 and Appendix A, Figure 10: *"Three monitoring wells were also installed..."*

    As noted in the general comments the boring/well installation logs must be provided. Field sheets for the groundwater sampling should be provided as well. According to the Trip Report completed by the MEDEP representative onsite September 5, 2006, the wells were to be installed in their proposed locations due to lack of any significant findings in the soil borings. Based on Figure 7 from the approved Work Plan, MW-02 was to be installed southwest of the "TOP-1 Filled Area" in the position where TOP-01-05 is located. These direct push and monitoring well locations were switched based on MEDEP review and comment of the original draft workplan to better evaluate groundwater chemistry in the presumed downgradient direction from the filled area. The water elevations in the three wells confirm that there is currently no groundwater monitoring location downgradient of the main area of concern. Navy must install an additional location to confirm groundwater conditions

in the agreed upon location, and should sample all wells at high and low water, as a single round may not be representative. Analyses should include, at least, metals, VOCs and DRO based on the recent data.

11. Section 3.3.1.3 and 3.3.1.4:

The residual DRO exceeding 10 mg/kg in soils around 1099 and 1114 Parliament (and to a lesser extent other locations) may represent a source for dissolved groundwater contamination for some time into the future. Since this property is included in the BRAC transfer MEDEP and the Navy must decide how to deal with these sites, such as bounding the soil and groundwater contamination and establishing Institutional Controls and potentially in situ treatment.

12. Section 3.3.3 TOP-1 Investigation:

The TOP-01 data indicate low impacts to groundwater at the TOP-01 site. DRO was detected in all samples, one location over the MEG, and lead was detected in one well (MW-2) below the MEG. No Freon was detected despite the frequent soil detections. Since this property is included in the BRAC transfer MEDEP and the Navy must decide how to deal with this site.

13. Appendix B - Table 3:

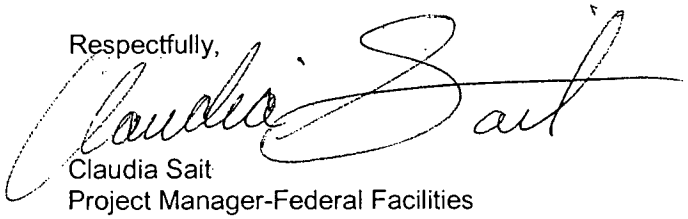
The detection of trichlorofluoromethane (Freon) in every soil sample suggests a lab contamination issue, unless there was disposal in the area. The compound was not detected in groundwater samples, which would be expected if it was found throughout the soil column. Sample location SB-08-08 has most compounds listed as "NA", why was data not available?

14. Appendix J:

The Chain of Custody forms (COCs) for the DRO confirmation samples, and the TOP-01 and Building 369 samples must be included as an appendix to the report. (ED)

Please contact me at (207) 287-7713 or claudia.b.sait@maine.gov, if you have any questions or comments.

Respectfully,



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